

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of producing an oxide superconducting wire, said method comprising the steps of:

forming a precursor of oxide superconductor into a rod;

forming a ceramic layer on the surface of said rod to produce a ceramic-coated rod;

inserting a plurality of said ceramic-coated rods into a metal pipe to produce a multifilament billet;

subjecting said multifilament billet to plastic deformation to form a multifilament wire, having the ceramic layer of each ceramic-coated rod in contact with the ceramic layer of at least one other ceramic-coated rod;

subjecting said multifilament wire to a heat treatment to produce oxide superconductors.

2. – 3. (Cancelled)

4. (Currently Amended) A method of producing an oxide superconducting wire, said method comprising the steps of:

forming a precursor of oxide superconductor in silver-based sheath to produce a coated rod;

forming a ceramic layer on the surface of said coated rod by extrusion to produce a ceramic-coated rod;

inserting a plurality of said ceramic-coated rods into a metal pipe to produce a multifilament billet;

subjecting said multifilament billet to plastic deformation to produce a multifilament wire, having the ceramic layer of each ceramic-coated rod in contact with the ceramic layer of at least one other ceramic-coated rod;

subjecting said multifilament wire to a heat treatment to produce oxide superconductors.

5. (Currently Amended) A method of producing an oxide superconducting wire as defined in ~~one of claims from claim~~ 1, wherein said precursor of said oxide superconductors contains a part of the composition of said oxide superconductors, while said ceramic powder layer contains the remaining composition a part of the composition elements of said oxide superconductors.

6. (Currently Amended) A method of producing an oxide superconducting wire as defined in ~~one of claims~~ 1, said method further comprising a step of twisting said multifilament wire prior to said heat treatment.

7. (Currently Amended) A method of producing an oxide superconducting wire as defined in ~~one of claims~~ 1, wherein the powder of said ceramic layer contains an oxide of at least one kind selected from the group consisting of bismuth, lead, strontium, calcium, barium, titanium, niobium, molybdenum, tantalum, tungsten, vanadium, zirconium, copper and silver.

8. (Currently Amended) A method of producing an oxide superconducting wire as defined in ~~one of claims~~ 1, wherein said oxide superconductors are bismuth-based superconductors.

9. (Currently Amended) A method of producing an oxide superconducting wire as defined in claim 7, wherein said powder of ceramic layer contains an oxide including an alkali earth metal and copper.

10. (Original) A method of producing an oxide superconducting wire as defined in one of claims 1, wherein said metal pipe contains at least one kind selected from the group consisting of silver, copper, manganese, magnesium, antimony, iron, chromium, and nickel.

11. (Original) A method of producing an oxide superconducting wire as defined in claim 1, wherein said ceramic layer formed by an extrusion process.

12. – 17. (Cancelled)

18. (Original) A method of producing an oxide superconducting wire as defined in claim 4, said method further comprising a step of twisting said multifilament wire prior to said heat treatment.

19. – 20. (Cancelled)

21. (Currently Amended) A method of producing an oxide superconducting wire as defined in claim 4, wherein ~~the powder of~~ said ceramic layer contains an oxide of at least one kind selected from the group consisting of bismuth, lead, strontium, calcium, barium, titanium,

22. – 23. (Cancelled)

24. (Original) A method of producing an oxide superconducting wire as defined in claim 4, wherein said oxide superconductors are bismuth-based superconductors.

25. – 26. (Cancelled)

27. (Original) A method of producing an oxide superconducting wire as defined in claim 4, wherein said metal pipe contains at least one kind selected from the group consisting of silver, copper, manganese, magnesium, antimony, iron, chromium, and nickel.

28. (New) A method of producing an oxide superconducting wire as defined in claim 1, wherein the step of inserting the plurality of the ceramic-coated rods into the metal pipe further comprises the step of inserting the plurality of the ceramic-coated rods into the metal pipe with the ceramic-coated rods in a spaced relationship with respect to each other and with no metal between the spaced ceramic-coated rods.

29. (New) A method of producing an oxide superconducting wire as defined in claim 4, wherein the step of inserting the plurality of the ceramic-coated rods into the metal pipe further comprises the step of inserting the plurality of the ceramic-coated rods into the metal pipe with the ceramic-coated rods in a spaced relationship with respect to each other and with no metal between the spaced ceramic-coated rods.

30. (New) A method of producing an oxide superconducting wire as defined in claim 4, wherein the step of inserting the plurality of the ceramic-coated rods into the metal pipe further comprises the step of inserting the plurality of the ceramic-coated rods into the metal pipe with the ceramic-coated rods in a spaced relationship with respect to each other and with ceramic between the spaced ceramic-coated rods.

31. (New) A multifilament oxide superconducting wire formed from a multifilament billet, said multifilament billet comprising:

- a plurality of oxide superconductor precursor rods;

- a ceramic layer coated on the surface of each of the plurality of oxide superconductor precursor rods;

- a metal pipe encasing the plurality of oxide superconductor precursor rods each coated with the ceramic layer;

- wherein:

- the multifilament billet is subject to plastic deformation and a heat treatment to form the multifilament oxide superconducting wire, and

- the ceramic layer of each rod is in contact with the ceramic layer of at least one other rod.

32. (New) The multifilament oxide superconducting wire of claim 31, wherein each of the plurality of oxide superconductor precursor rods comprises a silver-based sheath, and wherein the ceramic layer is coated onto each of the oxide superconductor precursor rods with the silver-based sheath through extrusion.

33. (New) The multifilament oxide superconducting wire of claim 31, wherein the rods are in a spaced relationship relative to each other and with no metal between the spaced rods.

34. (New) The multifilament oxide superconducting wire of claim 32, wherein the rods are in a spaced relationship relative to each other and with ceramic between the spaced rods.